Exploring Modern Technology Dependency among Students: An Investigation into Santa Rosa Science and Technology High School Students' Utilization of Artificial Intelligence(AI) Chatbots in Learning

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APPROVAL SHEET

This qualitative research entitled **Exploring Modern Technology Dependency among Students: An Investigation into Santa Rosa Science and Technology High School Students' Utilization of Artificial Intelligence(AI) Chatbots in Learning**, prepared and submitted by **June Ray Colle, Niellou Carl Corro, John Bryan Escobia, Alvin Laurence Gregorio, Sean Allexi Iglesia, Ezra Solomon Pereyra, and John Matthew Roque** from Grade 11 - Alcala, in partial fulfillment for the subject **Practical Research 1** is hereby approved and accepted.

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ABSTRACT

Over the years, technology has experienced growth that led to the development of AI. With the rise of AI, one type of it is gaining popularity recently and that is AI Chatbots. This newly developed technology poses positive and negative impacts on our educational sector that may lead to modern technology dependency. This Qualitative study utilizes a Narrative Research design to gather stories that are rich in data to find answers to the research questions. The researchers wanted to find out ways students use Chatbots, their perception of its impact on learning, and their opinion on how AI usage contributes to Modern Technology Dependency. The respondents were selected through a pre-survey that assessed their past experiences with AI chatbots. The respondents' interviews served as the source of the data. The researchers determined that ChatGPT is the most prominent chatbot utilized by students to study a subject or to consult regarding language subjects. Students perceived AI Chatbots as an efficient tool for motivation, assistance, learning, and convenience. They believe it is helpful to students' learning and accept that dependence on technology is unavoidable in present times and acknowledge their reliance on it. However, they believe that students can utilize technology to one's advantage with the right discipline and balance.

TABLE OF CONTENTS

PRELIMINARIES

Title Page ---------- i

Approval Sheet ---------- ii

Acknowledgement ---------- iii

Abstract ---------- iv

Table of Contents ---------- v

List of Figures ---------- viii

List of Tables ---------- ix

CHAPTER 1 - THE PROBLEM AND ITS BACKGROUND

The Problem and its Background ---------- 1

Statement of the Problem ---------- 2

Conceptual Framework ---------- 3

Scope and Delimitation ---------- 5

Assumptions of the Study ---------- 6

Significance of the Study ---------- 6

Definition of Terms ---------- 7

CHAPTER 2 - REVIEW OF RELATED LITERATURE AND STUDIES

Technology Acceptance Model ---------- 8

Student’s Technology Use ---------- 9

Effects of Technology on Student ---------- 10

Positive Impacts of Technology Use ---------- 10

Negative Impacts of Technology Use ---------- 11

Artificial Intelligence and Chatbot ---------- 11

The Role of Chatbots in Education ---------- 12
Chatbots and Student Inquiry ---------- 12
Safety and Guidelines for Chatbot in Education ---------- 12
Artificial Intelligence Use in Education ---------- 13
Effects of Artificial Intelligence on Students ---------- 13
Synthesis ---------- 14

CHAPTER 3 - METHODOLOGY

Research Design ---------- 17
Subjects of the Study ---------- 17
Instrument ---------- 18
Data Gathering Procedure ---------- 18
Data Analysis ---------- 19

CHAPTER 4 - RESULTS AND DISCUSSIONS

Theme 1 ---------- 23
Theme 2 ---------- 23
Theme 3 ---------- 25
Theme 4 ---------- 26
Theme 5 ---------- 27
Theme 6 ---------- 28
Textural Description ---------- 29
Structural Description ---------- 29
Essence ---------- 30

CHAPTER 5 - SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of Findings ---------- 31

Essence ---------- 32

Conclusion ---------- 32

Recommendations ---------- 33

References ---------- 34

Appendices

Appendix A: Instrument ---------- 39

Appendix B: Pre-Survey ---------- 40

Appendix C: Permission Letter ---------- 41

Appendix D: Curriculum Vitae ---------- 42

List of Figures

Figure 1. Conceptual Framework ---------- 4

List of Tables

Table 1 Significant statements of students that use AI Chatbots in Learning ---------- 20

Table 2 Six Theme Clusters Divided into Two Groups ---------- 22

Chapter 1

THE PROBLEM AND ITS BACKGROUND

As technology continuously progresses and evolves, learning becomes more flexible. Students' study habits continue to change as technology helps learning become more dynamic (Ireland,nd). Technology lets students have easier access to information, but it can also be a source of distraction. They use technology to support their learning because of its advantages and ease of access to information (Owena et al., 2015). However, Students show a significant amount of dependence on technology. They depend on it to accomplish tasks such as projects and assignments (Nwosu et al., 2015).

In recent years, students relied on technology which led to hindering their development of thinking and opinions because the information was readily available online (Nawalgaria, 2021). Despite the common belief that technology enhances the learner's achievements and motivation to accomplish their tasks (Al-Hariri & Al-Hattami, 2017) being too reliant on technology can affect students' competencies in arithmetic, writing, and reading (Spitzer, 2014). Technological advancements can also lead to procrastination due to the work we have been doing manually being automated or easier to do with less effort. Despite the goal of technology's advancement is to give us more time in our lives, some are having the wrong idea about it. Instead of taking advantage of technology to save us time, they end up wasting it (Raza, 2016).

In the Philippines, like in many other countries, there is a growing dependence on technology, particularly among students (YoursHumanly, 2020). With the pandemic forcing schools to shift to online learning, students have had to rely more heavily on technology than ever before (De, Pandey, and Pal, 2020). While the use of technology in education has been growing steadily over the past few decades globally, as Artificial Intelligence(AI) and its different types like an AI Chatbot, and other forms of technology become increasingly integrated in learning, it is important to understand their impact on how students learn, as well as their effect on students' habits of procrastination.

A Chatbot, which serves as a virtual assistant, is a computer program that facilitates conversations between humans and machines. In recent years, the popularity of Chatbots has soared, largely driven by significant advancements in AI technology. AI Chatbots have undoubtedly become one of the most utilized modern tools which has improved normal computer interaction (Paliwal et al., 2020). It has found widespread use in customer service, sales, marketing, and lead generation. Their versatility extends beyond their initial applications, making them invaluable tools in managing tasks and providing customized strategic solutions. These AI Chatbots are designed to closely mimic human responses, thereby replacing the need for human interaction (Gupta et al., 2020).

The implementation of modern technology in education has changed how students learn and study. The researchers are eager to investigate the impact of modern technology on students' learning habits particularly on dependence on modern technology in their learning. Thus, Rani (2021) suggests that more research should be conducted in the future to transform education through the use of digital technology.

Now that in recent years AI technology has been polished and used, this study would like to take a deeper understanding of its uses in academics, and the students' dependency on advanced technology. This is due to the fact that these technologies are widely accessible and are easily used by students. This study aims to discover the impacts of students' dependency on AI in their learning; to uncover the negative effects of dependency on technology, ranging from their motivation up to their skill competency in learning, doing activities, or accomplishing day-to-day tasks.

Statement of the Problem

This study aimed to explore the utilization of AI Technology and its possible application on their learning as perceived by Santa Rosa Science and Technology High

School Students in the school year 2022-2023. This study aimed to provide insights into how reliance on technology, such as AI chatbots, affected students' behaviors or strategies towards learning.

Specifically, this study seeks to answer the following questions:

1. Why do students utilize AI chatbots for learning?
2. How do students perceive the impact of their utilization of AI Chatbots in their learning?
3. How does the utilization of AI Chatbots in learning lead or contribute to risk of modern technology dependency?

Conceptual Framework

Figure 1

Conceptual Framework About the Impact of Modern Technology on Students, particularly when using A.I. Chatbots

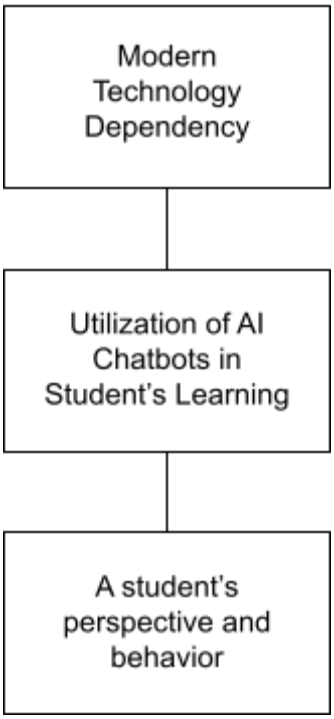

Figure 1 focuses on the relationship between modern technology, specifically the utilization of AI Chatbots in student learning, and its impact on students' perspectives and behavior. Modern technology, including AI, has become increasingly important in education and has been recognized as a key strategy for improving the quality of education (Wang & Woo, 2020).

This research aims to explore how students utilize AI Chatbots in their learning and how it influences their behavior and perspective towards technology. The utilization of AI Chatbots in student learning pertains to how AI Chatbots is used in educational settings, such as virtual assistants, intelligent tutoring systems, and automated grading systems. The focus on students' perspectives and behavior is crucial because it allows us to comprehend how students engage with technology and how this influences their learning outcomes, which could be positive or negative.

Scope and Delimitation

This qualitative research aims to explore the utilization and perceived impact of AI Chatbots to learners. This research will be directed towards all grade levels of SRSTHS A.Y. 2022 - 2023.

Harappa Education (2021) explains that narrative research is a qualitative approach that focuses on understanding an individual's personal experiences by analyzing their stories. They collect data through means such as case studies, surveys, observations, or other similar methods.

In this qualitative research, the researchers serve as the main instrument of the study along with surveys and interview guides. The surveys will be employed through google forms while the interviews will be conducted through face-to-face interviews. The survey will evaluate participants' familiarity with AI virtual assistants. The participants will be selected using the purposive criterion sampling method, which ensures that the researchers are able to seek participants who have a high level of familiarity with AI technology. This kind of sampling is useful for identifying respondents with a given criteria to follow. This sampling method will allow us to filter out unnecessary information and focus on rich information given by respondents that passed the criteria (ResearchArticles, 2020).

This survey will allow us to choose our participants for our interview. The participants will be asked permission to be audio recorded for the interview. The interview will go in depth on the reasons why students use AI Chatbots in learning, their views on the effectiveness of AI tools, their experience with AI Chatbots in learning, and their perceived benefits and challenges of AI Chatbots use in learning. The interviews will be recorded and transcribed verbatim. The data privacy law will be maintained, and the anonymity of the participants will be secured along with the information that they provide.

According to Mbah (2010), utilization of a survey research design helps to find out the familiarity of the participants to the topic being tackled. With this context we will be able to gather appropriate respondents for our interviews on familiarity with the usage of AI technology. As their dependence on technology to accomplish tasks increases, their utilization of creative faculties and innovative thinking decreases. (Bhowmik, 2021). Through data analysis, it would be possible to determine whether or not there are any observable negative effects on dependency on AI Chatbots technology, as we are already aware of the positive effects of advanced technologies.

Assumptions of the Study

The study assumes that students use technology widely in their academic lives. In addition, the study is anchored in the assumption that the respondents will answer the surveys and interviews truthfully which will result in reliable and valid data for analysis. The study is timely relevant to the respondents which will result in inputs from their own knowledge and experience.

Significance of the Study

This study aims to provide insights into how reliance on technology, such as AI Chatbots, affects students' learning habits. The results of the study will be significant in showing how technological advancement will affect the following:

Teachers. This study will inform the school teaching about how students utilize technology in their learning and help them modify and to adapt their teaching styles.

Students. This study will bring awareness to the students on how utilizing technology would affect their learning.

Educational Institutions. This study will allow educational institutions to design and implement policies to promote appropriate and responsible use of technology.

Future researchers. The research will be beneficial to future researchers that will conduct a similar study. This study will help them to present how technology continues to affect students' learning as it advances.

Definition of Terms

For the purpose of clarification, some of the terms used in this study are defined herein:

Artificial Intelligence (AI). Virtual Assistant that uses computer systems to perform tasks that usually require human intelligence.

AI Chatbots. is a type of Ai software program that simulates human conversations. Chatbots can understand natural human language and run simple, automated tasks.

AI Learning Behavior. Behaviors that students exhibit in their learning, such as how they take notes, process information, or perform in study groups that may be affected by the student's reliance on technology.

Learning Strategy. Processes and actions that are consciously deployed by students to help them in learning.

Modern Technology. Modern products, services and infrastructure that are designed and built using scientific knowledge and engineering, such as Computers or AI.

Perceived Impact. The effects or influence of AI in learning as observed by the students.

Santa Rosa Science and Technology High School (SRSTHS). A non-sectarian, co-educational secondary public science and technology high school located in J.P Rizal Blvd. Barangay Market Area in Santa Rosa City, Laguna, 4026, Philippines.

Technology Dependency. Significant reliance on technology.

Utilization of AI. The act of making practical and effective use of AI in students' learning.

Chapter 2

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents the related literature and studies after thorough and systematic research. This chapter contains all the data that is related to modern technology dependency, specifically AI, and how students utilize them. This chapter also serves as the basis and foundation of the whole study containing all the gathered data and findings. The chapter shall give the readers a deeper knowledge with regards to the topic of the study.

Technology Acceptance Model

This study will use the TAM model. The Technology Acceptance Model (TAM), developed by Fred Davis, aims to explain users' satisfaction with technology by identifying key variables that influence their behavior. The Technology Acceptance Model (TAM) has been extensively employed in research to comprehend the adoption and use of technology and has been proven to be a useful tool in predicting and clarifying user behavior(Dillon & Morris, 1996). According to Venkatesh and Bala (2008), an individual's intention to use a technology is influenced by two beliefs: perceived usefulness, their perception of how useful the technology will be in improving their job performance, and perceived ease of use, their perception of how easy it will be to use the technology without much effort. These two factors, in turn, have an impact on the individual's intention to use the technology. TAM also suggests that other factors, such as social influence, training, and support, can indirectly affect the intention to use technology by influencing the user's perception of usefulness and ease of use (Venkatesh & Davis, 2000; Davis, Bagozzi, & Warshaw, 1989). The TAM model will be used in this study to examine the relationship between the independent variables such as familiarity with technology,

education, and others with two dependent variables, perceived usefulness, and perceived ease of use.

Student's Technology Use

Technology in itself is advantageous in many different aspects. This study would like to take a deeper look at its uses in education. Specifically, on how students use technology in their studies and their perspective in implementation of technology as a basis and helping tool for their learning. Though, students have little knowledge of the technology they can use to support their learning (Margaryan et al., 2011).

Students nowadays may have the potential and skill in technology, but their motivation is yet to be raised (Kvavik, n.d.). This is another problem that makes students not able to fully utilize technology in education. To make students more motivated on the use of technology in education, they should know its effects on learning. According to Abdullah et al. (2019), utilizing technology as a teaching tool will motivate students which leads to better overall learning experience. Active engagement is important as it makes students more likely to understand the positive effects of technology (Shuell & Farber, 2001). The use of mobile devices is also found out to motivate students (Rani, 2021). The results of the study of Abachi & Muhammad (2014) also supports this finding. They found out that mobile learning has a better perceived effect than traditional learning.

According to Williamson (2018), technology is useful and easy to use, which may imply why students can easily adapt. This allowed students to quickly finish tasks at hand with ease and that technology also improves efficiency of students (Williamson, 2018). The utility of technology for students not only lessens their burdens, it also benefits them through productivity and effective learning via different mediums like presentations and other digital learning mediums. Students' perception on the use of technology in education may be influenced by the technology's perceived usefulness (Ubaidillah, 2020). According to Beckman et al. (2014),

students mainly use technology to access information quickly through the internet. This applies as well outside the boundaries of education where information can easily be accessed through the internet. Students use this ease of access to information to ask questions, scour for guidance, or look for inspiration for a project. It is highlighted that having access to information that quickly creates a valuable connection to students (Beckman et al., 2014).

Effects of Technology on Students

The generation of students present today has a different way of learning compared to those of the past. Technology is everywhere, and information is easy to access (Francis, 2017). Its influence has extended to education, where it has been used to enhance teaching and learning. As technology continues to evolve, it has become increasingly important to explore its effects on students, both positive and negative, to better understand the impact it has on their academic performance, engagement, and motivation. This section aims to investigate the effects of modern technology on students.

Positive Impacts of Technology Use

The findings of Carstens et al. (2021) suggest that the use of technology in the classroom has many positive impacts, particularly in terms of student motivation and engagement. Teachers reported higher levels of engagement among students who use technology in the classroom, indicating that students are more enthusiastic about learning when technology is involved. The study of Raja & Nagasubramani (2018) identifies the positive effects of technology in education like better learning and teaching. The results of the study of Francis (2017) also suggests that using technology in the classroom motivates most of the students. An addition to this, the study of Kaur (2020) found out that the use of technology in education improves the performance of the students.

Negative Impacts of Technology Use

While there are several positive impacts of technology use in the classroom, there are also negative impacts to consider. According to Carstens et al. (2021), some teachers felt that they needed more support in utilizing technology in the classroom. This suggests that the integration of technology into the classroom is not always seamless, and educators may require additional training to effectively utilize technology. The study of Raja & Nagasubramani (2018) also adds that technology in education may worsen the students' writing skills, focus, and may cause the likelihood of cheating. Aside from these qualities, the students' mental state and mindset may also be affected. From the study of Kurmanova et al. (2022), it is found out that the students felt concerned, agitated, sad, and incomplete without technology and the internet. On the other hand, when students experience frustration when using technology in learning, their performance declines (Kaur, 2020).

Artificial Intelligence and Chatbot

Chatbots are being utilized more frequently to help students succeed. Interaction in the modern age of technology where communication and other activities rely strongly on the internet platform. The integration of AI and Chatbots in education has become an increasingly popular topic of discussion. With advancements in technology, chatbots have been used for educational purposes in a variety of ways, such as teaching and learning, administration, assessment, advisory, and research and development (Okonkwo, 2021). Chatbots appear to have a lot of potential for providing users with simple and quick service that addresses their questions. Productivity is the most common reason why people use chatbots but others use it for entertainment, social factors and novelty (Adamopoulou & Moussiades, 2020). This section aims to investigate the utilization of AI, specifically chatbots, in education and its impact on students.

The Role of Chatbots in Education

According to Okonkwo (2021), Chatbots have been used for various educational purposes, including enhancing teaching and learning experiences. The use of Chatbots in education has been seen to increase student engagement and provide students with the opportunity to receive immediate feedback on their work. Additionally, Chatbots can provide students with personalized learning experiences, allowing them to learn at their own pace and in a way that suits their learning style. It can assist with inquiries and issues related to any subject matter (Stanford Graduate School of Education, 2021). According to Hwang & Chang (2021) the research on Chatbots in education is still in its early stages, but it is growing gradually. The findings in their study indicate that resources should be allocated to this area by technology education based researchers because of its potential for growth.

Chatbots and Student Inquiry

Ferlazzo (2023) notes that while Chatbots like ChatGPT can be useful in education, they should not replace the root motive for writing, which is our human capacity for questioning. The aim of pervasive AI should be to move away from teacher-created prompts and towards student inquiry. This approach will encourage students to think critically and creatively, and develop problem-solving skills, which are essential in today's world.

Safety and Guidelines for Chatbots in Education

While chatbots have the potential to revolutionize the way students learn, it is essential to use them with caution. Tlili et al. (2023) note that there needs to be more guidelines about how to use chatbots safely in education, as well as research into better and safer adoption of Chatbots. The study further revealed several research directions and questions that researchers and practitioners should investigate for the better and safe adoption of Chatbots, specifically ChatGPT.

Artificial Intelligence use in Education

AI has been transforming the education sector in numerous ways. It has provided both teachers and students with tools and platforms that have improved the efficiency and effectiveness of teaching and learning. For instance, AI has enabled the customization and personalization of learning materials to cater to the specific needs and capabilities of individual students. This has resulted in improved learning experiences for students (Chen, L. et al., 2020).

Moreover, AI has had a significant impact on the administration, instruction, and learning areas of the education sector. For example, AI can provide teachers with a virtual teaching assistant that can assist with grading, generating lesson plans, and performing other administrative tasks. Additionally, AI can support parents by involving them in their children's learning environments and providing them with the information they need to help their students succeed when they are not in the classroom (Vampugani & Swathi, 2018).

The potential impacts of AI in education are significant and wide-ranging. Some of the worldwide case studies show that AI systems have been positively recognized for improving the quantity and quality of communication, providing just-in-time, personalized support for large-scale settings, and enhancing the feeling of connection. However, participants in some studies have also noted that adopting AI systems in online learning could enable personalized learner-instructor interaction at scale but at the risk of violating social boundaries (Seo et al., 2021).

Effects of Artificial Intelligence on Students

The implementation of artificial intelligence tools to students such as chatbots like ChatGPT creates insights of negative effects and usage to people with less understanding of the topic. According to Malinka K., et al. (2023), Chatbots such as ChatGPT can easily be

misused for cheating, thus giving away the insight and bad reputation for the use of Chatbots in learning. This pushes the idea of the negative effects artificial intelligence had on students. However, Malinka K., et al. (2023) had also found out that it can be useful as an aid for students in discussing encountered problems during lectures and learning. This proposes the idea of only using artificial intelligence for guidance and helping students gather information in much wider and quicker accessibility.

As students rely more on artificial intelligence for guidance rather than the council of a human instructor, their dependence on this comes into consideration. According to Essel H. B. et al. (2022), students with an in depth connection and interaction with Chatbots performed better academically than the council of a subject professor. Furthermore, students within an artificial intelligence chatbot educational program had significantly high interest in learning and self taught practices (Han et al., 2022). Usage of artificial intelligence chatbots continuously improves along the passage of time. It motivates learners to showcase their skillfulness in various areas, including physical and socio-emotional aspects (Salas-Pilco, 2020). Chatbots show that it is able to give and has a factor for students' improvement. AI Chatbots provide quality feedback on students' inquiries thus establishing a recognition within individuals (Lee et al., 2022).

Synthesis

This research wants to examine more closely at AI and how it is used in education. Namely, how students use technology into their studies and how they see technology as a foundation and aid to learning. Students’ view on using technology for education is impacted by its perceived usefulness (Ubaidillah, 2020). Utilizing technology in teaching motivates students and provides them with a better overall experience in learning (Abdullah et al., 2019). Technology is functional and not difficult to use which allows students to improve their efficiency

and to easily adapt and quickly complete tasks with ease (Williamson, 2018). Students mostly utilize technology to swiftly get information online. This is true even outside of the realm of education, where knowledge is readily available online (Beckman et al., 2014)

In order to better comprehend the influence that technology has on students' academic performance, engagement, and motivation, it is crucial to examine both its positive and negative consequences. The utilization of technology has many positive impacts (Carstens et al., 2021). The studies of Raja & Nagasubramani (2018), Francis (2017), and Kaur (2020) identifies the positive effects of technology in learning, like better learning and teaching, more motivated and better performing students. While using technology in the classroom has many benefits, there are also disadvantages to take into account. The studies of Raja & Nagasubramani (2018), Kurmanova et al. (2022), and Kaur (2020) identifies the negative effects of technology in learning, like declining the students' writing skills, focus, mental state, performance, and may cause the likelihood of cheating.

During recent times,the use of AI and Chatbots in education has been a widely discussed topic. As technology continuously advances, chatbots are being used for education in various ways such as teaching and learning, administration, assessment, advisory and research and development (Okonkwo, 2021). Using chatbots in education has been seen to improve student engagement and give students the opportunity to receive instantaneous feedback on their work (Okonkwo, 2021). While productivity is the primary motive for using chatbots, some people utilize them for socialization, amusement, and novelty purposes as well (Adamopoulou & Moussiades, 2020). Even though Chatbots have the potential to completely change the way students learn, we should conduct research, and improve guidelines on how to use and integrate chatbots safely into the educational sectors (Tlili et al., 2023).

Integrating AI such as Chatbots like ChatGPT in the learning environment may lead to negative effects misuse by individuals with less understanding of the topic. Chatbots can easily be misused for cheating and promotes the negative effects that AI has on students. However AI

Chatbots can be a useful aid for students for discussing problems and questions encountered during learning. This puts forward the idea of using AI Chatbots for only guiding and helping students gather information on a much wider scale in a shorter period of time.

We believe that the findings of the study that are presented are helpful to our research study because it supports our research ideas. We plan to explore the effects of AI Chatbots on students in Santa Rosa Science and Technology High School. So, the literature review presented shows the different effects of AI on students' learning.

Chapter 3

RESEARCH METHODOLOGY

This chapter presented the methods and procedures used in gathering the data needed in the study. This includes research design, subjects of the study, data gathering procedure and analysis of data.

Research Design

The research design used in this study is narrative research design. Narrative research design is a type of research design that aims to comprehend and capture human experiences by diving deeply into the meanings connected to individuals' life experiences (Delve & Limpaecher, 2020). This enables the researcher to find out significant aspects of people's lives that are provided by the participants' own words (Ntinda, 2019). The researchers believe that this research design is appropriate in interpreting the data in our study and give a better understanding of the problem.

Subjects of the Study

The participants of the study are students of SRSTHS in the school year 2022 - 2023. A short questionnaire was handed out to the school population to be answered briefly. The survey was assessed if the students meet the researchers' criteria to be a respondent. According to Jones et al. (2013), using pre surveys enables the researchers to validate the data that would be collected from the population of respondents. The sampling technique that the researchers utilized is purposive criterion sampling. This sampling technique allowed researchers to obtain a large amount of data from the information gathered, and it also enabled them to report their findings and its impact on the population (Purposive Sampling 101, 2021). This allowed the researchers to gather participants with rich data that enabled the researchers to reach data saturation efficiently. The criteria that were set for the respondents was their familiarity with AI

technology and experiences in utilizing AI technology for their studies. The respondents that attained a high score on every criteria were included as an interview participant.

Instrument

The researchers will use a researcher-made interview questionnaire. The interview questionnaire will consist of a set of open-ended questions to be answered by the participants, the data gathered will be recorded through audio recording with the participant's consent and permission. This interview will answer questions which provide necessary information to explore the experiences of the selected participants in utilizing AI Chatbot Technology on their studies and the possibilities of how it may lead to their dependency on technology. These questions include the type of AI Softwares students use, how they use it and the reasons as to why they do, in which specific situations or scenarios they use AI, and lastly, their opinion on their dependence on AI technology.

Data Gathering Procedure

The researchers will first obtain permission to conduct the study. With approval, they will conduct a survey that will gather information if the student meets the criteria of participation and ask for the students' consent to take part in the study.

The questionnaire will include questions about their familiarity with AI and if they utilize it for their studies. The survey will be distributed with the use of Google Forms. The researchers will contact the chosen respondents and schedule a date to conduct an interview. Before conducting the interview, the researchers will ask for consent on recording the audio of the interview. The researchers will ask the respondents questions that will provide data for the researcher's problems. The cycle continues until the researchers have reached data-saturation.

Data Analysis

In interpreting and analyzing the data gathered from the interview, the researchers will utilize narrative analysis**.** Narrative analysis is a suitable method for exploring the stories and experiences shared by the participants**.** This approach will allow the researcher to have an in-depth exploration of the experiences of the participants on AI technology. The researchers will utilize deductive reasoning to form conclusions from general premises from the data coming from the respondents. The deductive reasoning approach is supported by the Theory of TAM (Technology Acceptance Model).

Chapter 4

RESULTS AND DISCUSSIONS

This chapter presents the research findings of the data collected from interviewing the participants of the study. The results will be discussed in relation to the research objectives identified in the study. The data analysis approach has already been discussed in Chapter 3.

The table below provides a summary of notable statements from the interviews that are notable for addressing the primary research problems. These claims are given equivalent weight when describing the participants' interactions with AI chatbots.

Table 1
Significant statements of students that use AI Chatbots in Learning

1. "...Find ways and how to be more creative in writing."
2. "...to absorb and understand the concept..."
3. "My father keeps on using the, ChatGPT ... that forced me to use it more."
4. "Depends on the assignment, but most of the time Reading and Writing."
5. "It helped me find ways. Find ways and how to be more creative in writing."
6. "It helped me sleep more early."
7. "I mean it really is happening right now with the emergence of chatgpt and other AI bots... it would really lead to us being more lazy."
8. "I think I do depend on modern technology but with moderation."
9. "I do not need to spend my time trying to read articles just to get the specific information I needed."
10. "...It is a tool to guide us."
11. "...sometimes I do self-study with the use of modern technology."
12. "ChatGPT was first introduced to me by my friend"
13. "It also gives me specific information which I do not need to find whenever I use Google or other search engines."
14. "... it contributes to the improvement of technology to students since it gives information needed for their knowledge efficiently. However, it limits their mind into not having to explore critical thinking in a way that AI Chatbots gives them convenience."
15. "Being dependent on this technology is not being advise since it limits our mind. ... technology should just be a way to gain more knowledge than we have."
16. "As what I have said previously, it gave me fast and relevant information."
17. "There are other ways that AI helps me...in language subjects"
18. "I usually get more knowledge on what I usually search..."
19. "...depending on if I want to pass time.... I use some fictional Chatbots from beta.character.ai....."
20. "... It's just that students will use it to the point that they use AI Chatbots into their own educational advantage. Not only for their educational advantage but also for their own benefit as well."

21. "So, number one...it boost my motivation and gave me clear mind...And two, it satisfied my curiosity providing me knowledge."
22. "It helped me a lot... writing like language subjects."
23. “I would say ... practically all of them except for maybe like math since I typically use them to get like an overview or just some like really general knowledge about a subject.”
24. “Well at that time it was like very popular ... my friends were all using it ... I found out how useful and it was pretty accurate so I started using it a lot more.”
25. “...In terms of like chatgpt and other ai’s there have been a bunch of scandals about cheating or just overuse of it i think its like fine to use it for the most part however we shouldn't rely on technology too much ... "
26. "It helped me alot ... especially when it comes to assignments where ... I'd say like making like writing ... language subjects. "
27. “...compared to like opening up a book and finding the answers or like information there, it's just very, I use it a lot in a day.”
28. "I'd use it like a base to like understand well how to start and then go from there and start applying myself to the actual writing process itself.”
29. "...inspiration for writing essays and even poems..."
30. “… technology for me is a way to gain more, to help us with gaining more knowledge so i think that its good."
31. “... it's really popular especially on the internet and since a lot of my friends are using it.”
32. “I like that chatgpt can remember what i said earlier in that chat so i don't have to repeat everything i say over and over again if i want to ask for additional questions and what i ask.”
33. “I think it can contribute in helping me learn. In general, it contributes to ano more… its an extra resource along with text notes and stuff.”
34. "Mostly, language, anything language related and then, yes, mostly language."
35. "It was referred to me by a friend... they told me it can help me with my studies"
36. "It's fast and flexible.... It can paraphrase... It can expand an idea... It can speak tagalog, too... and it can even do math, and like, explain it...."
37. ".... there is no learning.... like yes, you finished it, but did you really do it?"
38. ".... i sometimes think "oh wait, there's ChatGPT, I'll just make it do this, do that", there really are times like that..... I guess if i never knew about chatgpt, until now I probably will take until midnight to finish my tasks.
39. "I guess it really would be part of us, to the point that students are faster in doing tasks... "
40. "... you know, we students like digital since it's easier, it's not time consuming, and as students we like that."

The significant statements highlighted in horizontalization are analyzed, outlined, and grouped into larger units of information called “meaningful units” or themes, a procedure called theme clustering. After a detailed examination of the significant statements and the entirety of the verbatim responses shared by the participants, the researchers were able to identify 6 theme clusters which are divided into two so as to answer the central questions of the study:

what have the participants experienced in being a student utilizing AI chatbots (textural description) and how the participants have experienced using Ai Chatbots in learning (structural description). Table 2 presents the groupings of clustered themes based on the significant statements and their relative ideas.

Table 2
Six Theme Clusters Divided into Two Groups

Group A: Textural Themes

Theme 1: Students' View on AI Chatbots utility in school life
- Gets motivation
- Create learning strategies
- Convenient for obtaining information
- Efficient for school work

Theme 2: Students Perception on Modern Technology Dependency
- Being dependent on technology is unavoidable
- Technology is necessarily not a bad thing
- Limit on how dependent people can be on technology

Theme 3: Students' perception of modern technology dependence on oneself
- Modern technology plays a significant role in shaping their learning style
- Technology has become essential in academic life

Group B: Structural Themes

Theme 4: Ai Chatbots Utilization
- Helps students learn
- Literary assistance

Theme 5: Reasons of Ai Chatbot Utilization
- Influence of peers
- Popularity

Theme 6: Results of AI Chatbots' Utilization to their learning
- Modern Technology Dependency
- Good learning strategies

1. **As to what have the participants experienced in being a student utilizing AI chatbots.**

Theme 1. Students' View on AI Chatbots utility in school life. The respondents' views on AI Chatbots consisted of how they were able to utilize them to create their individual learning strategies as well as muster the motivation to finish their academic work. As stated by one of the respondents, AI Chatbots allowed students to quickly gain motivation and create competent learning strategies to satiate their learning curiosities. Respondents have also claimed that AI Chatbots are efficient for school work allowing them to have any information they need to finish their academic work. The respondents have also noted how its convenience allowed the students to have better opportunities for rest and sleep during weekdays. AI Chatbots have been shown to provide numerous areas of convenience and opportunities for learning as stated by the students. The students' views on the use of AI Chatbots in school life externalized from the following responses:

(1) "*It helped me sleep more early.*"

(2) "*As what I have said previously, it gave me fast and relevant information.*"

(3) "*So, number one...it boosted my motivation and gave me clear mind...And two, it satisfied my curiosity, providing me knowledge.* **"**

(5) "*I think it can contribute in helping me learn. In general, it contributes to ano more… it's an extra resource along with text notes and stuff.*"

According to the study of Yin et al. (2021), students' intrinsic motivation when learning with the use of AI Chatbots is strong.

Theme 2. Students' Perception on Modern Technology Dependency. According to the students, being dependent on technology is unavoidable but not necessarily a bad thing because they believe technology is what makes people's lives easier than before and that it also helps people learn and be more productive. They believe that with proper utilization and

discipline, people can use their dependency on technology to their own advantage. Most students have already accepted the fact that people have grown dependent on the ever-growing technology, and they believe that the same thing will apply to AI Chatbots, they believe that the popularity and accessibility of AI Chatbots will contribute to their widespread adoption among students. The ease of use and availability of AI Chatbots make them convenient tools for learning. The students expect that more students will depend on AI Chatbots due to their easy accessibility. Some students even support the idea that it is acceptable to be dependent on technology and believe that technology is very beneficial as a student. However, they do believe that there is a limit to how dependent or reliant people can be on modern technology. Some students are concerned that people won't learn anything and that it will limit their minds if they just keep relying on technology. While some are concerned that people will simply be too dependent and become lazy because of it. These perceptions are externalized from the following responses:

(1) "*I mean it really is happening right now with the emergence of ChatGPT and other AI bots that we use for our assignments…*"

(1) "*...it would really lead to us being more lazy.*"

(2) "*Being dependent on this technology is not being advised since it limits our minds… technology should just be a way to gain more knowledge than we have… a tool to guide us.*"

(3) "*... It's just that students will use it to the point that they use AI chatbots into their own educational advantage… also for their own benefit as well.*"

(4) "*Once it gets better, the amount of subjects students can apply it on is definitely going to increase, which will increase their overall dependency towards it.*"

(4) "*I think a lot more students will depend on it, especially if it popularizes with how easily accessible it is and how easy to use it is.*"

(4) "*...In terms of like AI's, there have been a bunch of scandals about cheating or just overuse of it, I think it's like fine to use it for the most part however we shouldn't rely on technology too much...* "

(5) "*...its not technology's fault… technology for me is a way to gain more, to help us with gaining more knowledge so i think that its good.*"

(6)"*…if we just depend on bots, where is the learning?*"

(6) "*To me, I agree, since we are in the modern world now, and we cannot avoid the growth of technology, it's there now, we should just accept it.*"

(6) "*I guess it really would be part of us, to the point that students are faster in doing tasks...* "

The Telegraph (2021) confirms these findings by claiming that while modern technology could create dependency among students by making their lives easier, It could also open the door to more expansive and interactive learning among the students.

Theme 3. Students' perception of modern technology dependency on oneself. The students believe that modern technology, specifically AI Chatbots, will play a significant role in shaping the dependency of students on technology for their learning experiences in the next 5 years. The participants underline the convenience offered by technology in terms of researching and communicating. The participants acknowledge that technology has become an integral part of their academic life, making it convenient for them to complete their assignments. Their dependence on digital tools is evident in their preference for the digital over traditional methods of learning. They acknowledge that technology has already become an integral part of their lives and education, and their dependency on it will continue to grow. They anticipated that as more students discover AI Chatbots and as the technology itself improves, the application of AI Chatbots in education will expand. They foresee the integration of AI Chatbots into various subjects, extending beyond language and information-based topics. This growth in applicability

will further increase students' overall dependency on AI Chatbots. These perceptions are externalized from the following responses:

(4) "*…compared to like opening up a book and finding the answers or like information there, it's just very, I use it a lot in a day.*"

(4) "*I definitely think modern technology and AI Chatbot, the dependency the students have on it will continue and continue to grow more…*"

(4) "*Once it gets better, the amount of subjects students can apply it on is definitely going to increase, which will increase their overall dependency towards it.*"

(6) "*…you know, we students like digital since it's easier, it's not time-consuming, and as students we like that.*"

Carstens (2021) claims that students are comfortable using technology for their education. Students today have grown up in a digital environment. Students have used technology in a variety of ways. They can learn more comfortably thanks to technology.

2. **As to how the participants have experienced using Ai Chatbots in learning.**

Theme 4. AI Chatbots Utilization. The theme gives insights into how AI Chatbots were utilized by students in their studies. To this question, the participants gave a variety of answers. Although they each mentioned different things, the trend was to help them learn. Others use it to help them write. Other students noted that academic objectives can benefit greatly from using AI Chatbots, therefore making students learn more about how to be more creative when writing. Another reason is they use AI Chatbots to study for subjects. One student noted that they utilize AI Chatbots in helping them study lessons for their subjects. Another student said that they still use it to study for subjects but utilize it to make concepts easier to understand. These ways on how the students utilizes AI Chatbots are shown on the following responses:

(1) "*...Find ways and how to be more creative in writing.*"

(1) "*...to absorb and understand the concept...*"

(2) "*...sometimes I do self-study with the use of modern technology.*"

(4) "*It helped me a lot... writing like language subjects.*"

(5) "*...inspiration for writing essays and even poems...*"

According to Chen et al. (2020), AI has personalized learning materials to suit the needs of the students better, which lead to better learning experiences for them.

Theme 5. Reasons for AI Chatbot Utilization. The theme identifies the reasons why students utilize AI Chatbots. The participants' responses point out that they mostly use AI Chatbots because of their convenience and the influence of other users. A student noted that they were influenced by their friends, family, and because of its popularity.

On the other hand, some students pointed out the AI Chatbot's convenience to them as their main reason for utilizing the said AI. One student said that the AI Chatbot was convenient for them because of its ease of access to information. AI Chatbot is very reliable and flexible and can easily help them. These reasons externalized from the following responses from the students:

(1) "*My father keeps on using the ChatGPT ... that forced me to use it more.*"

(2) "*ChatGPT was first introduced to me by my friend.*"

(2) "*It also gives me specific information which I do not need to find whenever I use Google or other search engines.*"

(4) "*Well at that time it was like, very popular ... my friends were all using it ... I found out how useful and it was pretty accurate so I started using it a lot more.*"

(5) "*... it's really popular, especially on the internet and since a lot of my friends are using it."*

(5) "*I like that ChatGPT can remember what i said earlier in that chat so I don't have to repeat everything I say over and over again if I want to ask for additional questions and what I ask.*"

(6) "*It was referred to me by a friend... they told me it can help me with my studies*"

(6) "*It's fast and flexible.... It can paraphrase... It can expand an idea... It can speak Tagalog, too... and it can even do math, and like, explain it...*"

According to Ferlazzo (2023), Ai chatbots have started to become increasingly more popular among students and teachers thanks to its convenience and ease of access, specifically thanks to its convenience when it comes to asking for assistance or for literary help.

Theme 6. Results of AI Chatbots' Utilization to their learning. The respondents had given us two perceived resulting impacts of their utilization. First is dependency and followed by a good learning strategy. Students had talked about their dependency on technology usage, providing us the knowledge that through moderation, they were able to keep their dependency under control. Another student also shows great dependency on AI Chatbots to finish tasks immediately with answers very likely accessible. All of this corresponds to the first perceived result of AI utilization which is a dependency that we may call a disadvantage. Some respondents claimed that the ease of convenience that AI Chatbots had provided was not only providing opportunities for learning but was also starting to create dependency among them, which was noted by one of the respondents.

While on the other hand, there is still an advantage to using AI Chatbots, as stated by one of our participants. It provides a good learning strategy and can be good learning material for students. It is also utilized as a good tool to provide assistance to writing skills, which all fall under good learning strategies that students utilize in their learning. And due to it being a great tool for students to utilize and create their own learning strategy, it's greatly viewed by students to be beneficial and advantageous. These perceived benefits and impacts of their utilization are externalized from the following responses:

(1) "*I think I do depend on modern technology but with moderation.*"

(2) "*... it contributes to the improvement of technology to students since it gives information needed for their knowledge efficiently. However, it limits their mind to not having to explore critical thinking in a way that AI Chatbots give them convenience.*"

extra resource along with text notes and stuff."

(4) "*I'd use it like a base to like understand well how to start and then go from there and start applying myself to the actual writing process itself.*"

(5) "*I think it can contribute in helping me learn. In general, it contributes to ano more… it's an extra resource along with text notes and stuff.*"

(6) "*...I sometimes think "oh wait, there's ChatGPT, I'll just make it do this, do that", there really are times like that...I guess if I never knew about ChatGPT, until now I probably will take until midnight to finish my tasks.*"

(6) "*...there is no learning…like yes, you finished it, but did you really do it?*"

According to Malinka et al. (2023), the advantages of using AI Chatbots appropriately should not be overlooked. When students utilize this responsibly, it has a positive impact on their performance and enhances their abilities.

Textural Description. As presented, three prevailing themes: (Theme 1: Students' View on AI Chatbots utility in school life; Theme 2: Students Perception on Modern Technology Dependency; Theme 3: Students' perception of modern technology dependence on oneself) which explained that the students view AI Chatbots as a convenient tool in learning but the constant use of this technology has lead to being more dependent on it. However, they believe that with proper balance, AI Chatbots can be beneficial to them.

Structural Description. Explaining how and why students utilized AI Chatbots in learning and the results of their utilization of the technology are 3 emerging themes: (Theme 4: AI Chatbots Utilization; Theme 5: Reasons of Ai Chatbot Utilization; Theme 6: Results of AI Chatbots'

Utilization to their learning). In which students were influenced by their peers to try AI Chatbots and were captivated by the convenience and efficiency it offers. Students mainly use AI chatbots for literary assistance and overall help in grasping the ideas and learning different topics. And while some students were able to keep it under control, students became dependent on AI Chatbots, which was deemed to be a negative effect. On the other hand, students see it's utility and convenience very beneficial in not only doing tasks but also helping them learn which was deemed as a positive effect on the students' learning strategies and technology utilization.

Essence. After an in – depth examination of the textural (what) and structural (how) descriptions of the experiences shared by the respondents it is evident that the participants showed some degree of dependency towards AI chatbots utilization. However, this does not mean that it leads to a negative learning experience. Learning environment has led students to rely on what they have and what they can do to overcome a situation. This generation had deemed AI chatbots useful for their learning. Using it as a tool to help and gain knowledge from. Most of the participants had confessed using AI chatbots as a basis in writing literature for literary subjects. The only limitation there, is the discipline of the users to use the said tool wisely, as per using it on an educational platform.

Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presented the conclusions obtained from the findings of the study on the utilization of AI Chatbots of students, as well as recommendations which were based on the conclusions and purpose of the study. The conclusions were based on the purpose, research questions, and results of the study.

Summary of Findings

The findings showed the six students' reasons and ways of utilization of AI Chatbot in learning and how it affected their learning. Two key questions ere developed by the researchers with the goal to solve the main problem:

1. What have the participants experienced in being a student utilizing AI chatbots?
2. How have the participants experienced living in the church

The significant findings of this study is as follows:

1. **As to what have the participants experienced in being a student utilizing AI chatbots.**

The first three themes were developed after reading, rereading, analyzing, and reflecting on the verbatim interview transcriptions and describing students' experiences with AI Chatbots. Theme 1 describes the thoughts of students using AI Chatbots. Theme 2 described the views of Students on their reliance on Modern Technology and to the extent of which students feel dependent on technology in their academic pursuits. Theme 3 states the opinions of students about their own personal dependency towards modern technology in their daily lives.

2. **As to how the participants have experienced using Ai Chatbots in learning.**

The second group of themes explained how the participants have experienced using AI Chatbots in learning. Theme 4 explains the functions and features of AI chatbots used by students. Theme 5 explains the factors and influences that led to students to use AI Chatbots in learning. Theme 6 explores the advantages and drawbacks associated with AI Chatbots in relation to the dependency on modern technology.

Essence

The general advancement of our technology has led us here, where we are able to talk to human-like chatbots for advice and guidance for learning in general. This helped our respondents significantly in their learning. Their learning experience is also considered, due to the general convenience of AI chatbots as a tool. The respondents have deemed this technological advancement to be beneficial for them. Dependency is still there, but for students', they accept that they're dependent on it. Pledging to themselves that only their discipline holds the line for them.

Conclusion

Analyzing the textural (what) and structural (how) descriptions of the participants, the following conclusions were drawn.

1. Students view AI Chatbots as a convenient tool in learning; however, their excessive reliance on this technology has resulted in increased dependency. Nevertheless, they believe that with proper moderation, AI Chatbots can be beneficial to them.
2. Students were influenced by their peers to try AI Chatbots and were fascinated by the convenience and efficiency they provide. Students mainly use AI chatbots for literary assistance and overall help in grasping the ideas and learning different topics. While some students were able to use AI Chatbots in moderation, others became overly reliant on them, which was deemed to be a negative effect. On the other hand, students also

recognize the usefulness and convenience of AI chatbots in completing tasks and aiding their learning, which was seen as a positive impact on their learning strategies and use of technology.

Recommendations

In the light of the findings and conclusions drawn, the following recommendations are suggested:

1. For future researchers to conduct a similar study, the researchers recommend conducting their study with a larger sample size. They can also explore other populations outside the educational sector.
2. The researchers also recommend exploring AI Chatbots' role in motivation/leisure. This coincides with our findings following the utilization of AI Chatbots. Our study did not delve directly into said subject.
3. For future researchers to do a similar study concerning the Educators view on the usage of AI Chatbots. By delving into these complex and nuanced factors, it can gain a deeper understanding of this topic and how this technology can be effectively leveraged to enhance teaching and learning experiences.
4. Through the finding of the researchers, they recommend schools to apply regulations for usage of this technology. It provides good utility and could revolutionize learning and teaching.
5. The researchers would also like to recommend students to use AI Chatbots with regulations and with discipline as our findings show, students' perception of dependency may lead to decrease of critical thinking and remove learning as a whole.
6. The researchers would like to recommend tackling demographics in accordance with the same study. This would show if demographics had a significant impact in AI Chatbots utilization and other various differences that may arise.

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Appendix A

Instrument

Research Questions	**Interview Questions**
Why do students utilize AI chatbots for learning?	What AI chatbots do you use? **In what subjects or learning activities do you use those AI chatbots you identified? Do you still remember the first time you used them? Can you bring us back to that moment? What made you decide to choose/use that particular AI Chatbot?
How do students perceive the impact of their utilization of chatbots in their learning?	How did you find out about those AI chatbots? **What about those AI chatbots that made you decide to use them? Or keep on using them? **Any favorite features that you like? As a student using those AI chatbots, how did it help you in your learning? With this advanced technology, can you describe what contribution it makes in your learning? Would you consider it to be advantageous to the life of students and would recommend it to others? Why or why not?
How does utilization of AI lead or contribute to risk of modern technology dependency?	What is your perception about modern technology dependency? Do you consider yourself modern technology dependent? ***If yes, why? ***If not, do you see yourself becoming one if you keep using the AI chatbots? Why? How do you see this AI chatbot and modern technology dependency as part of students learning in the next 5 years?

Appendix B

Pre- Survey

Questions	Response	
	Yes	**No**
Are you familiar with the concept of chatbots(i.e. ChatGPT, Bing AI) in education?		
Have you ever used an artificial intelligent chatbot for learning purposes?		
Do you feel that using chatbots for learning can improve the quality of education?		
Do you think chatbots can help you learn more efficiently compared to traditional learning methods?		
Would you recommend the use of chatbots for learning to others?		
Are you open to being interviewed about this subject?		

Appendix C

Permission Letter

May 08, 2023

SYLVIA L. MARQUEZ, EdD
Principal IV
Santa Rosa Science and Technology High School

RECEIVED
MAY 09 2023

RE: **Permission to Conduct Research Study**

Dear Madam:

Greetings!

In partial fulfilment of our requirements for our subject Practical Research 1, we, the student researchers of Grade 11- Alcala namely: Colle, June Ray; Corro, Niellou Carl; Escobia, John Bryan; Gregorio, Alvin Laurence; Iglesia, Sean Allexi; Pereyra, Ezra Solomon and Roque, John Matthew, would like to ask for permission to conduct the research study entitled "Exploring modern technology among students: An investigation into SRSTHS students' utilization of Artificial Intelligence Chatbots in Learning". This study aims to explore the utilization of AI Technology and its possible application on their learning as perceived by Santa Rosa Science and Technology High School Students in the school year 2022-2023.

In connection to this, we are also requesting your good office to allow us to have the selected Santa Rosa Science and Technology High School students as our participants in the study. Rest assured that the gathered data will remain confidential and will be used only in academic purposes.

We believe that you are one in our enthusiasm to finish the requirement as compliance for our subject and to further enhance our research experience. We look for your positive response.

If approved, kindly sign below. Thank you!

Respectfully yours:

JOHN BRYAN B. ESCOBIA
Research Leader

Recommending Approval:

MARIEL T. CASTILLO
MT II-Practical Research 1 Teacher

Approved by:

SYLVIA L. MARQUEZ, EdD
Principal IV

Appendix D

Curriculum Vitae

Name: **Colle, June Ray C.**

Address: B13 L3 P3 Pearl St., Celina Plains, brgy. Labas, Santa Rosa, Laguna

Contact no: 09566323881

Email: juneraycolle06@gmail.com

Motto: ***"Be the change you want to see in the world"***

EDUCATIONAL BACKGROUND AND ACHIEVEMENTS

Santa Rosa Elementary School Central I - *Elementary*

YEAR 2012 - 2018

- Grade 6 - With Honors

Santa Rosa Science and Technology High School - *Junior High School*

YEAR 2018 - 2022

- Grade 7 - With Honors
- Grade 8 - With Honors
- Grade 9 - With Honors
- Grade 10 - With Honors

Santa Rosa Science and Technology High School - *Senior High School*

YEAR 2022 - present

- Grade 11 - With Honors

Name: **Corro, Niellou Carl A. Corro**
Address: Phs. 5, Blk. 4, Lot 5, South Ville 4, Pooc, Santa Rosa, Laguna
Contact no: 09603320810
Email: nielloucarl.corro23@gmail.com
Motto: ***"When life gives you lemons, make lemonade."***

EDUCATIONAL BACKGROUND AND ACHIEVEMENTS

Seven Pillars Catholic School - *Elementary*
YEAR 2012 - 2018

- Grade 6 - With Honors

Santa Rosa Science and Technology High School - *Junior High School*
YEAR 2018 - 2022

- Grade 7 - With Honors
- Grade 8 - With Honors
- Grade 9 - With Honors
- Grade 10 - None

Santa Rosa Science and Technology High School - *Senior High School*
YEAR 2022 - present

- Grade 11 - With Honors

Name: **Escobia, John Bryan B.**
Address: 122 Guadeloupe St., Santa Rosa Estates 2, Santa Rosa, Laguna
Contact no: 09760626168
Email: 424492160172@depedsantarosa.ph
Motto: ***"For every defeat, I ran around the mountain, until not even shame could keep up"***

EDUCATIONAL BACKGROUND AND ACHIEVEMENTS

Learning Links Academy - *Elementary*

YEAR 2012 - 2018

- Grade 6 - With Honors

Santa Rosa Science and Technology High School - *Junior High School*

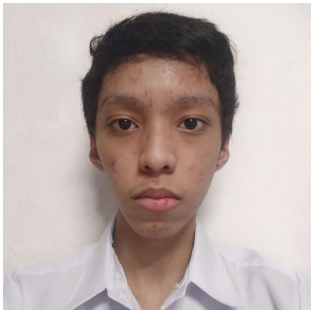
YEAR 2018 - 2022

- Grade 7 - None
- Grade 8 - With Honors
- Grade 9 - With High Honors
- Grade 10 - With Honors

Santa Rosa Science and Technology High School - *Senior High School*

YEAR 2022 - present

- Grade 11 - With Honors



Name: **Gregorio, Alvin Laurence C.**
Address: Blk. 59 Lot 15 P1-C San Lorenzo South, City of Santa Rosa, Laguna
Contact no: 0993200217
Email: alvingreg722@gmail.com
Motto: ***"If there's a will there's a way"***

EDUCATIONAL BACKGROUND AND ACHIEVEMENTS

Emmanuel Christian School - *Elementary*

YEAR 2012 - 2018

- Grade 6 - With Honors

Santa Rosa Science and Technology High School - *Junior High School*

YEAR 2018 - 2022

- Grade 7 - With Honors
- Grade 8 - With Honors
- Grade 9 - With Honors
- Grade 10 - With Honors

Santa Rosa Science and Technology High School - *Senior High School*

YEAR 2022 - present

- Grade 11 - With Honors

Name: **Iglesia, Sean Allexi N.**

Address: Blk. 10 Lot 35 Satelliteville Subd., Brgy. Market Area, City of Santa Rosa, Laguna

Contact no: 09983798064

Email: seanallexiiglesia05@gmail.com

Motto: ***"We may encounter many defeats but we must not be defeated"***

EDUCATIONAL BACKGROUND AND ACHIEVEMENTS

Holy Rosary College - *Elementary*

YEAR 2012 - 2018

- Grade 6 - With Honors

Santa Rosa Science and Technology High School - *Junior High School*

YEAR 2018 - 2022

- Grade 7 - With Honors
- Grade 8 - With Honors
- Grade 9 - With Honors
- Grade 10 - With High Honors

Santa Rosa Science and Technology High School - *Senior High School*

YEAR 2022 - present

- Grade 11 - With Honors

Name: **Pereyra, Ezra Solomon B.**
Address: 719, Prk. 4, Brgy. Sinalhan, Santa Rosa City, Laguna
Contact no: 09287019959
Email: 108484120358@depedsantarosa.ph
Motto: ***"You only can't if you stop trying to can"***

EDUCATIONAL BACKGROUND AND ACHIEVEMENTS

Santa Rosa Elementary School Central II - *Elementary*
YEAR 2012 - 2018

- Grade 6 - With Honors

Santa Rosa Science and Technology High School - *Junior High School*
YEAR 2018 - 2022

- Grade 7 - With Honors
- Grade 8 - With Honors
- Grade 9 - With Honors
- Grade 10 - None

Santa Rosa Science and Technology High School - *Senior High School*
YEAR 2022 - present

- Grade 11 - With Honors

Name: **Roque, John Matthew M.**
Address: B2 L3 U3 Cataquiz Homes Brgy. Tagapo Sta. Rosa Laguna
Contact no: 09060918076
Email: johnmatthewroque@gmail.com
Motto: ***"The journey won't start if you don't take the first step"***

EDUCATIONAL BACKGROUND AND ACHIEVEMENTS

Seven Pillars Catholic School - *Elementary*
YEAR 2012 - 2018

- Grade 6 - With Honors

Santa Rosa Science and Technology High School - *Junior High School*
YEAR 2018 - 2022

- Grade 7 - With Honors
- Grade 8 - With Honors
- Grade 9 - With Honors
- Grade 10 - With Honors

Santa Rosa Science and Technology High School - *Senior High School*
YEAR 2022 - present

- Grade 11 - With Honors